

**Appl. No.** : 09/077,173  
**Filed** : November 12, 1998

receptor has an amino acid sequence having more than 60% homology with the DNA sequence shown in SEQ ID NO:1.

84. (Twice Amended) A method for determining whether a ligand can activate a receptor which binds nucleotides, wherein said receptor has an amino acid sequence having more than 60% homology with the amino acid sequence shown in SEQ ID NO:2, comprising the steps of:

preparing an extract from cells expressing the receptor;  
isolating a membrane fraction from said extract;  
contacting said membrane fraction with said ligand; and  
assaying said membrane fraction for increased receptor activity, wherein increased activity indicates that said ligand is an activator of said receptor.

**Please add the following claims:**

93. The receptor of Claim 70 wherein the receptor has at least a two-fold increased functional response for pyrimidine nucleotides over purine nucleotides.

94. The receptor of Claim 93 wherein in the presence of pyrimidine nucleotides, the receptor presents a functional response to lower concentrations of pyrimidine nucleotides than to purine nucleotides as well as an increased response to similar concentrations of pyrimidine nucleotides than to purine nucleotides.

95. The isolated nucleic acid molecule of Claim 74 wherein the receptor has at least a two-fold increased functional response for pyrimidine nucleotides over purine nucleotides.

96. The isolated nucleic acid molecule of Claim 95 wherein in the presence of pyrimidine nucleotides, the receptor presents a functional response to lower concentrations of pyrimidine nucleotides than to purine nucleotides as well as an increased response to similar concentrations of pyrimidine nucleotides than to purine nucleotides.

97. The antisense probe of Claim 80 wherein the receptor has at least a two-fold increased functional response for pyrimidine nucleotides over purine nucleotides.

98. The antisense probe of Claim 97 wherein in the presence of pyrimidine nucleotides, the receptor presents a functional response to lower concentrations of pyrimidine nucleotides than to purine nucleotides as well as an increased response to similar concentrations of pyrimidine nucleotides than to purine nucleotides.